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EXAMINER
PHAM, HUNG Q

ART UNIT	PAPER NUMBER
2168	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/734,864	RHODES, JAMES J.
	Examiner	Art Unit	
	HUNG Q. PHAM	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 December 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

- *Claim Rejections - 35 USC § 112*

The rejection under 35 U.S.C. § 112, second paragraph, has been withdrawn in view of the amendment of claims 15-22.

- *Claim Rejections - 35 USC § 102*

Applicants' arguments with respect to the rejection under 35 U.S.C. § 102(e) have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claim 16 is objected to because of the following informalities: *said first computer* at Line 37 (*said first computer system* is respectfully suggested). Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-6, 8-13 and 15 are directed to a method, program for backing up and restoring files and system. This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a

tangible result. Specifically, the claimed subject matter does not produce a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. More specifically, the claimed subject matter provides for *receiving a request from said backup application.* This produced result remains in the abstract and, thus, fails to achieve the required status of having real world value.

Claims 1-22 are directed to a method, program for backing up and restoring files and system. This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful result. Specifically, the claimed subject matter does not produce a useful result because the claimed subject matter fails to sufficiently reflect at least one practical utility set forth in the descriptive portion of the specification. More specifically, while the described practical utility (utilities) is (are) directed to backing up files (Specification, Page 1 Lines 3-5), the claimed subject matter relates ONLY to restoring files as recited in claims 7, 14 and 22.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2, 9 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As in claims 2, 9 and 17, the claimed limitation, *receive <u>redundant copies of backup data</u>*, was not described in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1, 2, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Knight [USP 7,043,619 B1].

Regarding claims 1 and 8, Knight teaches a method and program for *backing up and restoring files* (Storage configuration is determined (Col. 1 Lines 32-39) for backup application (Col. 5 Lines 38-40)) comprising the steps of:

installing a daemon application on systems with available disk space to store backup files (As shown in FIG. 1, Internet Server 110 is connected to Storage Area Network 116 (Col. 3 Lines 49-52) as *systems with available disk space to store backup files*, wherein Storage Configurator Software Program as *a daemon application* is installed (Col. 4 Lines 21-24));

receiving a first metadata from said installed daemon applications, wherein said first metadata comprises information regarding available disk space (Col. 7 Lines 64-67);

creating a master file for each system available to store backup files (A layout of storage configuration for the existing storage is embodied in a document called SuggestedLayoutFile is created (Col. 8 Lines 10-18) as *a master file for each system available to store backup files*), *wherein said master file comprises information regarding a list of systems available to store backup files and an amount of available disk space to store backup files* (Col. 9 Lines 30-50, SuggestedLayoutFile includes a list of ordered storage types and available storage to store backup files);

installing a backup application on systems to perform a backup operation (As shown in FIG. 1, a plurality of client computer systems 102 (Col. 3 Lines 37-38) run network configuration software (Col. 5 Lines 10-13) that includes Edition Extension Backup Application 160 for backing up the application's data (Col. 5 Lines 38-42)); and

receiving a request from said backup applications to download said master file (Col. 10 Lines 7-25).

Regarding claims 2 and 9, Knight teaches all of the claimed subject matter as discussed above with respect to claims 1 and 8, Knight further discloses the step of *receiving a list of files to*

be backed up; and *selecting two or more systems from said master file to receive redundant copies of backup*

data (FIG. 15O).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3-7 and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Knight [USP 7,043,619 B1] in view of Whiting et al. [USP 5,778,395].

Regarding claims 3 and 10, Knight teaches all of the claimed subject matter as

discussed above with respect to claims 2 and 9, Knight further discloses the step of *storing a*

second metadata (Knight, FIG. 14D, name of the storage), but fails to teach the steps of *compressing*

and encrypting said backup data, and *storing a key.*

As disclosed by Whiting, backup data is compressed (Whiting, Col. 5 Lines 24-26) and

encrypted (Whiting, Col. 5 Lines 35-40), and a key is stored (Whiting, Col. 29 Lines 53-61).

It would have been obvious for one of ordinary skill in the art at the time the invention

was made to compress, encrypt backup data and storing a key in order to maintain data privacy.

Regarding claims 4 and 11, Knight and Whiting, in combination, teach all of the claimed

subject matter as discussed above with respect to claims 3 and 10, Knight further discloses

second metadata comprises systems storing said backup data (Knight, FIG. 14D, name of the storage).

Regarding claims 5 and 12, Knight and Whiting, in combination, teach all of the claimed

subject matter as discussed above with respect to claims 4 and 11, Whiting further discloses the

step of *transmitting said second metadata and said key to a central system* (Whiting, Col. 29 Lines 53-67).

Regarding claims 6 and 13, Knight and Whiting, in combination, teach all of the claimed

subject matter as discussed above with respect to claims 4 and 11, Whiting further discloses the

steps of *receiving a list of files to be restored; determining which systems store said files to be restored using*

said second metadata; and *connecting to one or more daemon applications on one or more systems storing said*

files to be restored (Whiting, Col. 14 Lines 26-65).

Regarding claims 7 and 14, Knight and Whiting, in combination, teach all of the claimed

subject matter as discussed above with respect to claims 6 and 13, Whiting further discloses the

steps of *receiving said files to be restored from said one or more daemon applications; uncompressing and*

decrypting said files to be restored using said key; and *restoring said files to be restored* (Whiting, Col. 14

Lines 26-65).

Regarding claim 15, Knight teaches a system comprising:

a processor (Knight, Col. 3 Lines 36-37 and Col. 4 Line 66-Col. 5 Line 1); and

storage coupled to said processor (Knight, Col. 4 Lines 21-30);

wherein said storage includes a computer program for backing up files, wherein said computer program comprises instructions embedded in said storage and executable by said processor, said instructions comprising (Knight, Col. 4 Lines 21-30 and Col. 5 Lines 29-42):

instructions for installing a daemon application on systems with available disk space to store backup files (As shown in FIG. 1, Internet Server 110 is connected to Storage Area Network 116 (Knight, Col. 3 Lines 49-52) as *systems with available disk space to store backup files*, wherein Storage Configurator Software Program as *a daemon application* is installed (Knight, Col. 4 Lines 21-24));

instructions for receiving a first metadata from said installed daemon applications, wherein said first metadata comprises information regarding available disk space (Knight, Col. 7 Lines 64-67);

instructions for creating a master file (A layout of storage configuration for the existing storage is embodied in a document called SuggestedLayoutFile is created (Knight, Col. 8 Lines 10-18) as *a master file for each system available to store backup files*), *wherein said master file comprises information regarding a list of systems available to store backup files and an amount of available disk space to store backup files for each system available to store backup files* (Knight, Col. 9 Lines 30-50, SuggestedLayoutFile includes a list of ordered storage types and available storage to store backup files);

instructions for installing a backup application on systems to perform a backup operation (As shown in FIG. 1, a plurality of client computer systems 102 (Knight, Col. 3

Lines 37-38) run network configuration software (Knight, Col. 5 Lines 10-13) that

includes Edition Extension Backup Application 160 for backing up the

application's data (Knight, Col. 5 Lines 38-42)); and

instruction for receiving a request from said backup applications to download said master

file (Knight, Col. 10 Lines 7-25).

The missing of the system as taught by Knight is a computer program for *restoring files*.

Whiting teaches software for restoring files (Whiting, Col. 14 Lines 26-65).

It would have been obvious for one of ordinary skill in the art at the time the invention

was made to include restoring files software as taught by Whiting in order to recover corrupted

files after backing up.

Regarding claim 16, Knight teach a system, comprising:

a central system (Knight, Col. 3 Lines 28-35);

a first computer system coupled to said central system (Knight, Col. 3 Lines 36-37, cient

computer system 102), said first computer system comprising:

a first processor (Knight, Col. 4 Line 66-Col. 5 Line 1); and

a first memory unit coupled to said first processor (Knight, Col. 4 Line 66-Col. 5 Line 1),

wherein said first memory unit is operable for storing a backup application operation

operable for backing up files (Knight, Col. 4 Lines 21-30 and Col. 5 Lines 29-42);

a second and third computer system, both couple to said central system (Knight, Col. 3 Lines 49-52,

Storage Area Networks 116) *wherein each of said second and said third computer system comprises:*

a daemon application operable for communicating with a said central system (Knight, Col. 7

Lines 63-67, Discoverer 212); and

a disk unit, wherein an available capacity of said disk unit is configured to store back-up files

(Knight, Col. 7 Lines 63-67, Discoverer 212); and

wherein said central system comprises:

a computer program for installing said daemon applications on said second and third computer systems and installing said backup application on said first computer system for backup and restoration of files (Knight, Col. 4 Lines 21-30 and Col. 5 Lines 29-42); wherein

said computer program comprises instructions executable by a central system processor and embedded in storage accessible to said central system processor, wherein the instructions comprise (Knight, Col. 4 Lines 21-30 and Col. 5 Lines 29-42):

instructions for installing said daemon application on said second and said third computer systems (As shown in FIG. 1, Storage Area Networks 116 (Knight, Col. 3 Lines 49-52) as *second and said third computer systems*, wherein Discoverer 212 as *daemon application* is installed (Knight, Col. 7 Lines 63-67));

instructions for receiving a first metadata from said installed daemon applications, wherein said first metadata comprises information regarding available disk space on said second and said third computer systems (Knight, Col. 7 Lines 64-67);

instructions for creating a master file (A layout of storage configuration for the existing storage is embodied in a document called SuggestedLayoutFile is created (Knight, Col. 8 Lines 10-18) as *a master file for each system available to store backup files*), *wherein said master file comprises information regarding a list of systems available to store backup files and an amount of available disk space to store backup files for each system to store backup files* (Knight, Col. 9 Lines 30-50, SuggestedLayoutFile includes a list of ordered storage types and available storage to store backup files);

instructions for installing said backup application on said first computer

system to perform a backup operation (As shown in FIG. 1, a plurality of client

computer systems 102 (Knight, Col. 3 Lines 37-38) run network

configuration software (Knight, Col. 5 Lines 10-13) that includes Edition

Extension Backup Application 160 for backing up the application's data

(Knight, Col. 5 Lines 38-42)); and

instructions for transferring a copy of said master file to said first computer

.   *responsive to receiving a request from said backup application to download said master*

file (Knight, Col. 10 Lines 7-25).

The missing of the system as taught by Knight is a *restoring files* program in backup

application

Whiting teaches software for restoring files (Whiting, Col. 14 Lines 26-65).

It would have been obvious for one of ordinary skill in the art at the time the invention

was made to include restoring files program as taught by Whiting in order to recover corrupted

files after backing up.

Regarding claim 17, Knight and Whiting, in combination, teach all of the claimed subject

matter as discussed above with respect to claim 16, Knight further discloses the step of *receiving*

a list of files to be backed up; and *selecting two or more systems from said master file to receive redundant*

copies of backup data (FIG. 15O).

Regarding claim 18, Knight and Whiting, in combination, teach all of the claimed subject

matter as discussed above with respect to claim 17, Knight further discloses the step of *storing a*

second metadata (Knight, FIG. 14D, name of the storage). As disclosed by Whiting, backup data is

compressed (Whiting, Col. 5 Lines 24-26) and encrypted (Whiting, Col. 5 Lines 35-40), and a key is stored (Whiting, Col. 29 Lines 53-61).

Regarding claim 19, Knight and Whiting, in combination, teach all of the claimed subject matter as discussed above with respect to claim 18, Knight further discloses *second metadata comprises systems storing said backup data* (Knight, FIG. 14D, name of the storage).

Regarding claim 20, Knight and Whiting, in combination, teach all of the claimed subject matter as discussed above with respect to claim 19, Whiting further discloses the step of *transmitting said second metadata and said key to a central system* (Whiting, Col. 29 Lines 53-67).

Regarding claim 21, Knight and Whiting, in combination, teach all of the claimed subject matter as discussed above with respect to claim 19, Whiting further discloses the steps of *receiving a list of files to be restored; determining which systems store said files to be restored using said second metadata;* and *connecting to one or more daemon applications on one or more systems storing said files to be restored* (Whiting, Col. 14 Lines 26-65).

Regarding claim 22, Knight and Whiting, in combination, teach all of the claimed subject matter as discussed above with respect to claim 21, Whiting further discloses the steps of *receiving said files to be restored from said one or more daemon applications; uncompressing and decrypting said files to be restored using said key;* and *restoring said files to be restored* (Whiting, Col. 14 Lines 26-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM T. VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HUNG Q PHAM
Examiner
Art Unit 2168

February 19, 2007